

What is claimed is:

1. A method for doing call classification on a call to a 1

destination endpoint, comprising the steps of: 2

receiving audio information from the destination

endpoint; 4

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analyzing using automatic speech recognition the received audio information for a first type of classification;

analyzing using automatic speech recognition the

received audio information for a second type of classification; 8

and 9

determining a call classification for the destination endpoint in response to the analysis of the first type of classification and the analysis of the second type of 12

classification. 13

2. The method of claim 1 wherein the analysis for the 1

first type of classification is analyzing the audio information for 2

words. 3

The method of claim 2 wherein the analyzed words 1

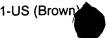
are formed/as phrases. 2

4. The method of claim 2 wherein the analysis for the 1

second type of classification is analyzing the audio information 2

for tones.

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- 5. The method of claim 4 wherein the step of 1 receiving audio information further comprises detecting speech 2 or tones in the audio information. 3
 - 6. The method of claim 5 wherein the step of analyzing for the first type of classification is responsive to the detection of speech in the audio information to enable the step of executing a Hidden Markov Model to determine the presence of words in the audio information.
 - 7. The method of claim 6 wherein the step of executing comprises the step of using a grammar for speech.
 - 8. The method of claim 6 wherein the step of analyzing for the second type of classification is responsive to the detection of tone in the audio information to enable the step of executing a Hidden Markov Model to determine the presence of tones in the audio/information.
 - 9. The method of claim 8 wherein the step of executing comprises the step of using a grammar for tones.
- 10. The method of claim 8 wherein the step of 1 determining comprises the step of executing an inference 2 engine. 3
 - 11. A method for doing call classification on a call to a



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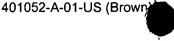
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2	destination endpoint, comprising the steps of:
3	receiving audio information from the destination
4	endpoint;
5	detecting speech or tones in received audio
6	information.
7	analyzing using automatic speech recognition the
8	received audio information for words in response to the
9	detection of speech;
10	analyzing using automatic speech recognition the
11	received audio information for tones in response to the
12	detection of tones; and
13	determining a call classification for the destination
14	endpoint in response to the analysis of words or the analysis of
15	tones.
1	12. The method of claim 11 wherein the step of
2	analyzing for speech comprises the step of executing a Hidden
3	Markov Model to determine the presence of words in the audio
4	information.
1	13. The method of claim 12 wherein the step of
2	executing comprises the step of using a grammar for speech.
1	14. The method of claim 12 wherein the step of
2	analyzing for tones comprises the step of executing a Hidden
3	Markov Model to determine the presence of tones in the audio



information. 4

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- The method of claim 14 wherein the step of 1 executing comprises the step of using a grammar for tones. 2
 - 16. The method of claim 15 wherein the step of determining comprises the step of executing an inference engine.
 - 17. A method for doing call classification by a automatic speech recognition unit on a call to a destination endpoint, comprising the steps of:

receiving audio information from the destination endpoint by the automatic speech recognition unit;

analyzing using automatic speech recognition the received audio information for a first type of classification by the automatic speech recognition unit;

analyzing using automatic speech recognition the received audio information for a second type of classification automatic speech recognition unit; and

determining a call classification for the destination endpoint in response to the analysis of the first type of classification and the analysis of the second type of classification by the automatic speech recognition unit.

18. The method of claim 17 wherein the analysis for 1 the first type of classification is analyzing the audio information 2

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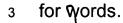
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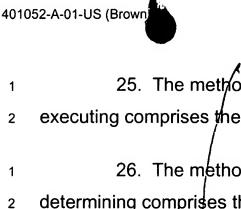
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- 1 \ 19. The method of claim 18 wherein the analyzed
- 2 words are formed as phrases.
 - 20. The method of claim 18 wherein the analysis for the second type of classification is analyzing the audio information for tones.
 - 2. The method of claim 20 wherein the step of receiving audio information further comprises detecting speech or tones in the audio information.
 - 22. The method of claim 21 wherein the step of analyzing for the first type of classification is responsive to the detection of speech in the audio information to enable the step of executing a Hidden Markov Model to determine the presence of words in the audio information.
 - 23. The method of claim 22 wherein the step of executing comprises the step of using a grammar for speech.
- 24. The method of claim 22 wherein the step of analyzing for the second type of classification is responsive to the detection of tone in the audio information to enable the step of executing a Hidden Markov Model to determine the presence of tones in the audio information.



25. The method of claim 24 wherein the step of executing comprises the step of using a grammar for tones.

26. The method of claim 24 wherein the step of determining comprises the step of executing an inference engine.

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27. A cal classifier for determining the call classification of a ¢alled destination endpoint, comprising:

an automatic speech recognizer for detecting first characteristics in audio information received from the called destination endpoint;

the automatic speech recognizer further detecting second characteristics in the audio information received from the called destination endpoint; and

inference engine for classifying the call in response to the automatic speech recognizer.

The call classifier of claim 27 wherein the first characteristics are words.

29. The call classifier of claim 28 wherein the words are formed into phrases.

30. The call classifier of claim 28 wherein the second characteristics are tones.

- 1 31 The call classifier of claim 30 wherein the
- automatic speech recognizer is executing a Hidden Markov
 Model.

